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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,995	12/23/2005	Matthew P. J. Baker	GB 030140	1539

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
REGO, DOMINIC E	
ART UNIT	PAPER NUMBER
2618	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/561,995	BAKER ET AL.	
	Examiner	Art Unit	
	Dominic E. Rego	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Saints et al. (US Patent #6,374,085).

Regarding claim 1, Saints teaches a mobile station *(Figure 1, element 12)* (100) for use in a radio communication system (50) comprising a plurality of base stations *(Figure 1, elements 16A and 16B)* (200), the mobile station (100) comprising transmitter means (110), receiver means (120) for receiving signals including transmit power control commands from the plurality of base stations (200) *(Col 2, lines 40-col 3, line 10)*, control means (150) adapted to compare the amplitude of the received transmit power control commands with a reliability threshold *(Col 5, lines 4-14: Saints teaches power control processor 28 receives the power level signal from quality measurement circuit 26, compares the signal to an adjustable threshold)* and adapted to vary the transmit power of the transmitter means (110) in response to the comparison *(Col 5, lines 4-22: Saint teaches Power control processor 28 produces preferably several (e.g., 8 or 16) power control messages in response to several power level signals per frame, where each power control message can indicate a change in power for the forward link*

signal. For example, the power control message could be a binary value, where a "1" value requests base stations 16a or 16b to increase the gain of the forward link signal, while a "0" value requests that the signal be decreased), wherein the control means (150) is further adapted to vary the reliability threshold (Col 5, lines 4-15) according to a function of one or more of:

the number of base stations (Figure 1, 16A and 16B) (200) from which the mobile station (figure 1, element 12) (100) receives transmit power control commands;

the number of commands to increase and/or decrease transmit power received in a preceding time period (Col 2, line 53-col 3, line 10;Col 9, lines 5-30);

a measured characteristic of signals received by the mobile station (100) (Col 4, lines 47-col 5, line 3).

Regarding claim 2, Saints teaches a mobile station (100), wherein the measured characteristic of signals received by the mobile station (100) is a measured characteristic of the received transmit power commands (Col 4, lines 47-col 5, line 3).

Regarding claim 3, Saints teaches a mobile station, wherein the control means is adapted to apply different reliability thresholds to the transmit power control commands received from the different base stations (Col 2, lines 53-col 3, line 26).

Regarding claim 4, Saints teaches a radio communication system (50) comprising a plurality of base stations *(Figure 1, elements 16A and 16B)* (200) and at least one mobile station (100), each base station (200) having a receiver means (220) for receiving signals from the mobile station (figure 1) (100) and a transmitter means (210) for transmitting signals including transmit power control commands to the mobile

station *(Col 2, lines 40-col 3, line 10)* (100), and the mobile station (100) having transmitter means (110), receiver means (120) for receiving signals including transmit power control commands from the plurality of base stations (200) *(Col 2, lines 40-col 3, line 10)*, control means (150) adapted to compare the amplitude of the received transmit power control commands with a reliability threshold *(Col 5, lines 4-14: Saints teaches power control processor 28 receives the power level signal from quality measurement circuit 26, compares the signal to an adjustable threshold)* and adapted to vary the transmit power of the transmitter means in response to the comparison *(Col 5, lines 4-22: Saint teaches Power control processor 28 produces preferably several (e.g., 8 or 16) power control messages in response to several power level signals per frame, where each power control message can indicate a change in power for the forward link signal. For example, the power control message could be a binary value, where a "1" value requests base stations 16a or 16b to increase the gain of the forward link signal, while a "0" value requests that the signal be decreased)*, wherein the control means is further adapted to vary the reliability threshold (Col 5, lines 4-15) according to a function of one or more of:

the number of base stations (200) (Figure 1, 16A and 16B) from which the mobile station (100) (figure 1, element 12) receives transmit power control commands;

the number of commands to increase and/or decrease transmit power received in a preceding time period (Col 2, line 53-col 3, line 10;Col 9, lines 5-30);

a measured characteristic of the signals received by the mobile station (100) (Col 4, lines 47-col 5, line 3).

Regarding claim 5, Saints teaches a radio communication system (50), wherein the control means (150) is adapted to apply different reliability thresholds to the transmit power control commands received from the different base stations (200) (Col 2, lines 53-col 3, line 26).

Regarding claim 6, Saints teaches a method of operating a radio communication system (50) comprising:

transmitting a signal from a mobile station (100); receiving the signal at a plurality of base stations (200) (figure 1);

at each base station (200), in response to receiving the signal, deriving transmit power control commands and transmitting a signal comprising the transmit power control commands *(Col 2, lines 40-col 3, line 10)*; and

at the mobile station (100), receiving the transmit power control commands from the plurality of base stations (200), comparing the amplitude of the received transmit power control commands with a reliability threshold *(Col 5, lines 4-14: Saints teaches power control processor 28 receives the power level signal from quality measurement circuit 26, compares the signal to an adjustable threshold)*, and adjusting the transmit power of a mobile station transmitter (110) in response to the comparison, further comprising deriving the reliability threshold (Col 2, line 53-col 3, line 26) according to a function of one or more of:

the number of base stations (200) (Figure 1, 16A and 16B) from which the mobile station (100) (figure 1, element 12) receives transmit power control commands;

the number of commands to increase and/or decrease transmit power received in a preceding time period (Col 2, line 53-col 3, line 10;Col 9, lines 5-30);
a measured characteristic of the signals received by the mobile station (100) (Col 4, lines 47-col 5, line 3).

Regarding claim 7, Saints teaches a method, comprising applying different reliability thresholds to the transmit power control commands received from the different base stations (200) (Col 2, lines 53-col 3, line 26).

Regarding claim 8, Saints teaches a mobile station (100) *(Figure 1, element 12)* for use in a radio communication system (50) comprising a plurality of base stations (200) *(Figure 1, elements 16A and 16B)*, the mobile station (100) comprising transmitter means (110), receiver means (120) for receiving signals including transmit power control commands from the plurality of base stations (200) *(Col 2, lines 40-col 3, line 10)*, control means (150) adapted to compare the amplitude of the received transmit power control commands with a reliability threshold *(Col 5, lines 4-14: Saints teaches power control processor 28 receives the power level signal from quality measurement circuit 26, compares the signal to an adjustable threshold)* and adapted to vary the transmit power of the transmitter means in response to the comparison *(Col 5, lines 4-22: Saint teaches Power control processor 28 produces preferably several (e.g., 8 or 16) power control messages in response to several power level signals per frame, where each power control message can indicate a change in power for the forward link signal. For example, the power control message could be a binary value, where a "1" value requests base stations 16a or 16b to increase the gain of the forward link signal,*

while a "0" value requests that the signal be decreased), wherein the control means (150) is further adapted to scale by a scale factor the amplitude of the received transmit power control commands prior to the measurement (Col 2, line53-col 3, line 26), and wherein the control means is further adapted to vary the scale factor according to a function of one or more of:

the number of base stations (200) (Figure 1, 16A and 16B) from which the mobile station (100) (figure 1, element 12) receives transmit power control commands;

the number of commands to increase and/or decrease transmit power received in a preceding time period (Col 2, line 53-col 3, line 10;Col 9, lines 5-30);
a measured characteristic of the signals received by the mobile station (100) (Col 4, lines 47-col 5, line 3).

Regarding claim 9, Saints teaches a mobile station (100), wherein the measured characteristic of signals received by the mobile station (100) is a measured characteristic of the received transmit power commands (Col 4, lines 47-col 5, line 3).

Regarding claim 10, Saints teaches a mobile station (100), wherein the control means (150) is adapted to apply different reliability thresholds to the transmit power control commands received from the different base stations (200) (Col 2, lines 53-col 3, line 26).

Regarding claim 11, Saints teaches a radio communication system (50) comprising a plurality of base stations (200) *(Figure 1, elements 16A and 16B)* and at least one mobile station (100), each base station (200) having a receiver means (220) for receiving signals from the mobile station (100) (figure 1) and a transmitter means

(210) for transmitting signals including transmit power control commands to the mobile station (100) *(Col 2, lines 40-col 3, line 10)*, and the mobile station (100) having transmitter means (110), receiver means (120) for receiving signals including transmit power control commands from the plurality of base stations (200) *(Col 2, lines 40-col 3, line 10)*, control means (150) adapted to compare the amplitude of the received transmit power control commands with a reliability threshold *(Col 5, lines 4-14: Saints teaches power control processor 28 receives the power level signal from quality measurement circuit 26, compares the signal to an adjustable threshold)* and adapted to vary the transmit power of the transmitter means in response to the comparison *(Col 5, lines 4-22: Saint teaches Power control processor 28 produces preferably several (e.g., 8 or 16) power control messages in response to several power level signals per frame, where each power control message can indicate a change in power for the forward link signal. For example, the power control message could be a binary value, where a "1" value requests base stations 16a or 16b to increase the gain of the forward link signal, while a "0" value requests that the signal be decreased)*, wherein the control means is further adapted to scale by a scale factor the amplitude of the received transmit power control commands prior to the measurement (Col 2, line53-col 3, line 26), and wherein the control means (150) is further adapted to vary the scale factor according to a function of one or more of:

the number of base stations (200) (Figure 1, 16A and 16B) from which the mobile station (100) (figure 1, element 12) receives transmit power control commands;

the number of commands to increase and/or decrease transmit power received in a preceding time period (Col 2, line 53-col 3, line 10;Col 9, lines 5-30);

a measured characteristic of the signals received by the mobile station (100) (Col 4, lines 47-col 5, line 3).

Regarding claim 12, Saints teaches a radio communication system (50), wherein the control means (150) is adapted to apply different reliability thresholds to the transmit power control commands received from the different base stations (200) (Col 2, lines 53-col 3, line 26).

Regarding claim 13, Saints teaches a method of operating a radio communication system (50) comprising:

transmitting a signal from a mobile station (100); receiving the signal at a plurality of base stations (200) (figure 1);

at each base station (200), in response to receiving the signal, deriving transmit power control commands and transmitting a signal comprising the transmit power control commands *(Col 2, lines 40-col 3, line 10)*;

at the mobile station (100), receiving the transmit power control commands from the plurality of base stations (200) *(Col 5, lines 4-14: Saints teaches power control processor 28 receives the power level signal from quality measurement circuit 26, compares the signal to an adjustable threshold)*, scaling by a scale factor the received transmit power control commands, comparing the amplitude of the scaled received transmit power control commands with a reliability threshold and adjusting the transmit power of the mobile station transmitter in response the comparison *(Col 5, lines 4-33:*

Saints teaches power control processor 28 receives the power level signal from quality measurement circuit 26, compares the signal to an adjustable threshold), further comprising deriving the scale factor according to a function of one or more of:

the number of base stations (200) (Figure 1, 16A and 16B) from which the mobile station (100) (figure 1, element 12) receives transmit power control commands;

the number of commands to increase and/or decrease transmit power received in a preceding time period (Col 2, line 53-col 3, line 10;Col 9, lines 5-30);

a measured characteristic of the signals received by the mobile station (100) Col 4, lines 47-col 5, line 3).

Regarding claim 14, Saints teaches a method, comprising applying different reliability thresholds to the transmit power control commands received from the different base stations (200) (Col 2, lines 53-col 3, line 26).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ahmed et al. (US Patent #5,946,346) teaches method and system for generating a power control command in a wireless communication system.

Lundby et al. (US Patent Application Publication #2006/0270443) teaches forward link power control of multiple data streams transmitted to a mobile station using a common power control channel.

Lundby (US Patent Application Publication #2003/0083082) teaches method and apparatus for adjusting a signal-to-interference threshold in a closed loop power control communication system.

Chi et al. (US Patent Application Publication #2006/0189342) teaches power control avoiding outer loop wind-up.

Bae (Us Patent Application Publication #2001/0006898) teaches method and apparatus for forward and reverse power control in mobile telecommunication system.

Livee et al. (US patent Application Publication #2006/0079268) teaches congestion control in a wireless communication system using the battery level.

Lee et al. (US Patent Application Publication #2003/0125068) teaches method of performing power control in a mobile communication system.

Suonsivu et al. (US Patent #6,542,581) teaches method for controlling the transmission power in a digital subscriber line.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic E. Rego whose telephone number is 571-272-8132. The examiner can normally be reached on Monday-Friday, 8:30 am-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dominic E. Rego.

2/20/7

PHILIP J. SOBUTKA
PATENT EXAMINER